

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-8 (cancelled).

9. (currently amended) A method for protecting a surface of and increasing the temperature stability of a porous ceramic body, comprising the steps of:

applying to the surface a slurry composition comprising:

a binding agent;

a ceramic material different from the material of the ceramic body;

at least one boron containing compound;

solvent; and

impregnating the slurry into the pores of the ceramic body wherein the ratio of boron compound to binding agent in the slurry is from 1:6 to 1:900, and wherein the method produces a porous ceramic body stable to higher temperatures than a porous ceramic body produced without the at least one boron containing compound.

10. (original) A method according to claim 9, wherein the binding agent comprises silica particles.

11. (original) A method according to claim 9, wherein the solvent comprises water.

12. (original) A method according to claim 9, wherein the ceramic material comprises cordierite.

13. (original) A method according to claim 9, further comprising the steps of:
drying the slurry in the pores of the ceramic body; and
firing the dried slurry in the pores.

14. (original) A method according to claim 9, wherein the ceramic body is provided in the form of a tile.

15-19. (cancelled)

20-25. (cancelled)

26. (currently amended) A method for producing a surface protected ceramic body, comprising:
impregnating a slurry into the pores of a ceramic body; and
drying the slurry in the pores of the ceramic body to produce the surface protected ceramic body;
wherein the slurry comprises a boron-containing compound and further comprises a binding agent, a ceramic material different from the material of the ceramic body, and a solvent, wherein the ratio of boron compound to binding agent in the slurry is from 1:6 to 1:900, and wherein the surface protected ceramic body can be heated to 2500°F for 20 hours without cracking.

27. (previously presented) A method according to claim 26, wherein the binding agent comprises silica and the solvent comprises water.

28. (previously presented) A method according to claim 26, wherein the ceramic material comprises cordierite.

29. (previously presented) A method according to claim 26, further comprising firing the dried slurry in the pores.

30. (previously presented) A method according to claim 26, wherein the drying step comprises directing a surface heating source against the surface of the ceramic body.

31. (previously presented) A method according to claim 26, wherein the drying step comprises heating the entire ceramic body.

32. (previously presented) A method according to claim 29, wherein the firing step comprises directing a surface heating source against the surface.

33. (previously presented) A method according to claim 29, wherein the firing step comprises heating the entire ceramic body.

34. (previously presented) A method according to claim 9, wherein the boron containing compound comprises boron carbide.

35. (previously presented) A method according to claim 26, wherein the boron containing compound comprises boron carbide.

36. (currently amended) A method of preparing a surface hardened porous ceramic body comprising:

applying an aqueous slurry comprising boron carbide, silica, and cordierite to the surface of the ceramic body;

impregnating the slurry into the pores of the ceramic;

drying the slurry in the pores of the ceramic body; and

firing the dried slurry in the pores,

wherein the ratio of boron carbide to silica in the slurry is from 1:6 to 1:900.

37. (cancelled).

38. (cancelled).

39. (previously presented) A method according to claim 36, wherein the porous ceramic body is provided in the form of a tile.

40. (previously presented) A method according to claim 37, wherein the method produces a porous ceramic body stable to higher temperatures than a porous ceramic body produced without the at least one boron containing compound.

41. (previously presented) A method according to claim 9, wherein the slurry comprises boron carbide, cordierite, silica, and water.

42. (previously presented) A method according to claim 9, wherein the slurry further comprises molybdenum silicide or silicon carbide.

43. (previously presented) A method according to claim 9, wherein the boron compound in the slurry does not produce an acid that can attack the ceramic body.

44. (previously presented) A method according to claim 9, wherein the boron containing compound comprises a material selected from the group consisting of boron carbide, boron butoxide, boron nitride, and boron nitrate.

45. (previously presented) A method according to claim 26, wherein the boron compound in the slurry does not produce an acid that can attack the ceramic body.

46. (previously presented) A method according to claim 26, wherein the boron containing compound comprises a material selected from the group consisting of boron carbide, boron butoxide, boron nitride, and boron nitrate.